

[Federal Register Volume 77, Number 167 (Tuesday, August 28, 2012)]
[Rules and Regulations]
[Pages 51892-51894]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2012-21010]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-1045; Directorate Identifier 2011-NE-32-AD; Amendment 39-17168; AD 2012-17-05]

RIN 2120-AA64

Airworthiness Directives; Honeywell International Inc. Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Honeywell International Inc. models TFE731-4, -4R, -5, -5R, -5AR, and -5BR series turbofan engines. This AD was prompted by a report of a rim/web separation of a first stage low-pressure turbine (LPT1) rotor assembly. This AD requires replacing affected LPT1 rotor assemblies with assemblies eligible for installation. We are issuing this AD to prevent uncontained disk separation, engine failure, and damage to the airplane.

DATES: This AD is effective October 2, 2012.

ADDRESSES: For service information identified in this AD, contact Honeywell International Inc., 111 S. 34th Street, Phoenix, AZ 85034-2802; Web site: <http://portal.honeywell.com>; or call Honeywell toll free at phone: 800-601-3099 (U.S./Canada) or 602-365-3099 (International Direct). You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; phone: 562-627-5246; fax: 562-627-5210; email: joseph.costa@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the Federal Register on February 21, 2012 (77 FR 9868). That NPRM proposed to require replacing affected LPT1 rotor assemblies with LPT1 rotor assemblies eligible for installation.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the one comment received on the proposal and the FAA's response to the comment.

Request To Clarify Definition Paragraph

One commenter requested we change a term in paragraph (h) of the proposed AD. The commenter requested that "tie rod" be changed to "tie shaft." The commenter said that making this change would allow a level of disassembly to access the inlet total temperature harness and other hardware without affecting the low-pressure turbine (LPT) module.

We do not agree. Mandating access to the LPT module in the AD and suspect disks when the tie rod is unstretched is consistent in achieving AD compliance sooner for the Falcon 20 and CASA 101 airplanes. LPT disk separations in these airplanes have been determined to be higher risk than for engines in other applications. We did not change the AD.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 9868, February 21, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 9868, February 21, 2012).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD will affect 1,550 engines installed on airplanes of U.S. registry. We also estimate that it will take about 1 work-hour per engine to perform the actions at next access and 165 work-hours per unscheduled engine disassembly, and that the average labor rate is \$85 per work-hour. Replacement parts will cost about \$175,000 per engine. Based on these figures, we estimate the total cost of the AD to U.S. operators to be \$35,195,488 per year.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General Requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):



2012-17-05 Honeywell International Inc. (formerly AlliedSignal Inc., formerly Garret Turbine Engine Company): Amendment 39-17168; Docket No. FAA-2011-1045; Directorate Identifier 2011-NE-32-AD.

(a) Effective Date

This AD is effective October 2, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Honeywell International Inc.:

(1) Model TFE731-5 series turbofan engines, with a first stage low-pressure turbine (LPT1) rotor assembly, part number (P/N) 3075184-2, 3075184-3, or 3075184-4, installed, and

(2) Models TFE731-5AR and -5BR series turbofan engines, with a first stage LPT1 rotor assembly, P/N 3075447-1, 3075447-2, 3075447-4, 3075713-1, 3075713-2, 3075713-3, or 3074748-5, installed, and

(3) Models TFE731-4, -4R, -5AR, -5BR, and -5R series turbofan engines, with an LPT1 rotor assembly, P/N 3074748-4, 3074748-5, 3075447-1, 3075447-2, 3075447-4, 3075713-1, 3075713-2, or 3075713-3, installed.

(d) Unsafe Condition

This AD was prompted by a report of a rim/web separation of an LPT1 rotor assembly. We are issuing this AD to prevent uncontained disk separation, engine failure, and damage to the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(f) Engines Installed in Dassault-Aviation Falcon 20 and Construcciones Aeronauticas, S.A. (CASA) 101 Airplanes

(1) Remove the LPT1 rotor assembly at the next access to the LPT1 rotor assembly or at the next major periodic inspection, not to exceed 2,600 hours-in-service since last major periodic inspection, or 8 years after the effective date of this AD, whichever occurs first.

(2) Install an LPT1 rotor assembly that is eligible for installation.

(g) Engines Not Installed in Dassault-Aviation Falcon 20 or CASA 101 Airplanes

(1) Remove the LPT1 rotor assembly at the next core zone inspection, not to exceed 5,100 hours-in-service since last core zone inspection, or at the next time the LPT1 rotor disc is removed for cause, or 8 years after the effective date of this AD, whichever occurs first.

(2) Install an LPT1 rotor assembly that is eligible for installation.

(h) Definitions

(1) For the purpose of this AD, "next access" is when the low-pressure tie rod is unstretched.

(2) For the purpose of this AD, an LPT1 rotor assembly "eligible for installation" is an LPT1 rotor assembly not having a P/N listed in this AD.

(i) Installation Prohibition

After the effective date of this AD, do not install any LPT1 rotor assembly listed by P/N in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, into any engine.

(j) Alternative Methods of Compliance (AMOCs)

The Manager, Los Angeles Aircraft Certification Office, FAA, may approve AMOCs for this AD. Use the procedures in 14 CFR 39.19 to request an AMOC.

(k) Related Information

(1) For more information about this AD, contact Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; phone: 562-627-5246; fax: 562-627-5210; email: joseph.costa@faa.gov.

(2) Honeywell International Inc. Service Bulletin (SB) No. TFE731-72-3768; SB No. TFE731-72-3769; and SB No. TFE731-72-3770, pertain to the subject of this AD.

(3) For service information identified in this AD, contact Honeywell International Inc., 111 S. 34th Street, Phoenix, AZ 85034-2802; Web site: <http://portal.honeywell.com>; or call Honeywell toll free at phone: 800-601-3099 (U.S./Canada) or 602-365-3099 (International Direct).

(l) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on August 14, 2012.
Robert G. Mann,
Acting Manager, Engine & Propeller Directorate,
Aircraft Certification Service.